## ABSTRACT OF THE DISCLOSURE

A method for improving a performance of a heterojunction bipolar transistor is provided. The method includes steps of providing a substrate; forming a first at least one semiconductor layer on the substrate; forming a second at least one semiconductor layer on the first at least one semiconductor layer; and inserting a thermal treatment process within the second at least one semiconductor layer so as to improve a performance of the heterojuntion bipolar transistor. Furthermore, the thermal treatment process is performed at a temperature ranged from 300 °C to 800 °C.

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